



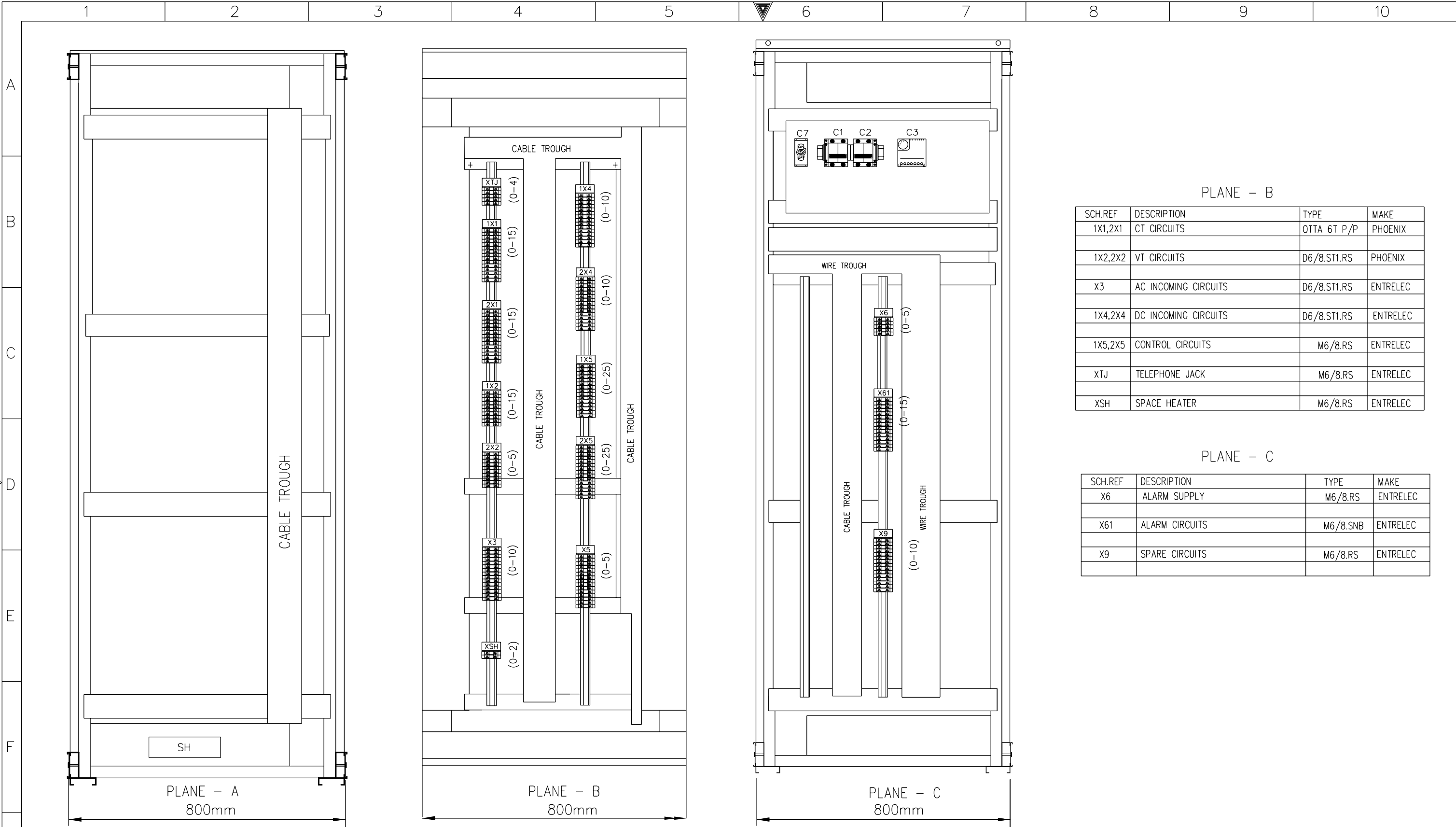


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A			POWER SYSTEMS NETWORK MANAGEMENT PROTECTION AND SUBSTATION AUTOMATION SYSTEMS WBS NO: S-13656					ABB AUTOMATION COMPANY LTD. 414, AL-KHARJ ROAD SECOND INDUSTRIAL CITY RIYADH-11383 K.S.A																																																																						
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C	CONTRACTOR : ABB Contracting Company																																																																													
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D	PROJECT : CONSTRUCTION OF NEW 132/13.8kV SS 8709 IN AL-KHARJ CITY																																																																													
	SUBSTATION : S/S 8709																																																																													
E	CONTRACT NO. : 11131113/00																																																																													
	TITLE : Assembly Drawing – +CBP2 [CAPACITOR BANK2]																																																																													
F																																																																														
G	<table><tr><td colspan="3">AS-BUILT BY _____ DATE _____</td><td colspan="2">CONTRACT NO. 11131113/00</td><td colspan="2">JOB ORDER NO. S-13656</td><td colspan="3">COVER SHEET</td><td colspan="2"> نقل الكهرباء الشركة الوطنية لنقل الكهرباء National Grid sa</td></tr><tr><td></td><td></td><td></td><td colspan="2">DRAWN BY <u>RIZ</u> CHECKED BY <u>KVR</u></td><td colspan="3">13.8kV CAPACITOR BANK-2 PROT. PANEL</td><td colspan="2">INDEX</td><td>PLANT NO.</td><td>DRAWING NUMBER</td><td>SHEET NO.</td><td>REV. NO.</td></tr><tr><td>01</td><td>14 08</td><td colspan="2">FACTORY AS BUILT</td><td colspan="2">DATE STARTED <u>24.01.2013</u> DATE COMPLETED _____</td><td colspan="3">S/S 8709-132/13.8KV IN AL-KHARJ CITY</td><td></td><td></td><td></td><td>SHT</td><td>CONT.</td></tr><tr><td>00</td><td>13 04</td><td colspan="2">FOR APPROVAL</td><td colspan="2">OPRG. DEPT. <u>CTPD</u> ENG. DEPT. <u>AUT-PSAC</u></td><td colspan="3">RIYADH SAUDI ARABIA</td><td>P</td><td>C421</td><td>CD-322953</td><td>G00</td><td>G01</td></tr><tr><td>REV. NO.</td><td>DATE</td><td colspan="2">DESCRIPTION</td><td colspan="2"></td><td colspan="3"></td><td></td><td></td><td></td><td></td><td></td></tr></table>										AS-BUILT BY _____ DATE _____			CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		COVER SHEET			 نقل الكهرباء الشركة الوطنية لنقل الكهرباء National Grid sa					DRAWN BY <u>RIZ</u> CHECKED BY <u>KVR</u>		13.8kV CAPACITOR BANK-2 PROT. PANEL			INDEX		PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.	01	14 08	FACTORY AS BUILT		DATE STARTED <u>24.01.2013</u> DATE COMPLETED _____		S/S 8709-132/13.8KV IN AL-KHARJ CITY						SHT	CONT.	00	13 04	FOR APPROVAL		OPRG. DEPT. <u>CTPD</u> ENG. DEPT. <u>AUT-PSAC</u>		RIYADH SAUDI ARABIA			P	C421	CD-322953	G00	G01	REV. NO.	DATE	DESCRIPTION											
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PLANE – B			
SCH.REF	DESCRIPTION	TYPE	MAKE
1X1,2X1	CT CIRCUITS	OTTA 6T P/P	PHOENIX
1X2,2X2	VT CIRCUITS	D6/8.ST1.RS	PHOENIX
X3	AC INCOMING CIRCUITS	D6/8.ST1.RS	ENTRELEC
1X4,2X4	DC INCOMING CIRCUITS	D6/8.ST1.RS	ENTRELEC
1X5,2X5	CONTROL CIRCUITS	M6/8.RS	ENTRELEC
XTJ	TELEPHONE JACK	M6/8.RS	ENTRELEC
XSH	SPACE HEATER	M6/8.RS	ENTRELEC

PLANE – C			
SCH.REF	DESCRIPTION	TYPE	MAKE
X6	ALARM SUPPLY	M6/8.RS	ENTRELEC
X61	ALARM CIRCUITS	M6/8.SNB	ENTRELEC
X9	SPARE CIRCUITS	M6/8.RS	ENTRELEC

AS-BUILT BY _____ DATE _____

CONTRACT NO. 11131113/00

JOB ORDER NO. S-13656

0114 08FACTORY AS BUILT

0013 04FOR APPROVAL

REV. NO. DATE DESCRIPTION

DRAWN BY RIZ CHECKED BY KVR

DATE STARTED 24.01.2013 DATE COMPLETED _____

OPRG. DEPT. CTPD ENG. DEPT. AUT-PSAC


ASSEMBLY DRAWING

13.8kV CAPACITOR BANK-2 PROT. PANEL

S/S 8709-132/13.8KV IN AL-KHARJ CITY

RIYADH SAUDI ARABIA

الشركة الوطنية لنقل الكهرباء

 **نقل الكهرباء**
National Grid sa

INDEX

PLANT NO.

DRAWING NUMBER

SHEET NO.

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REV. NO.

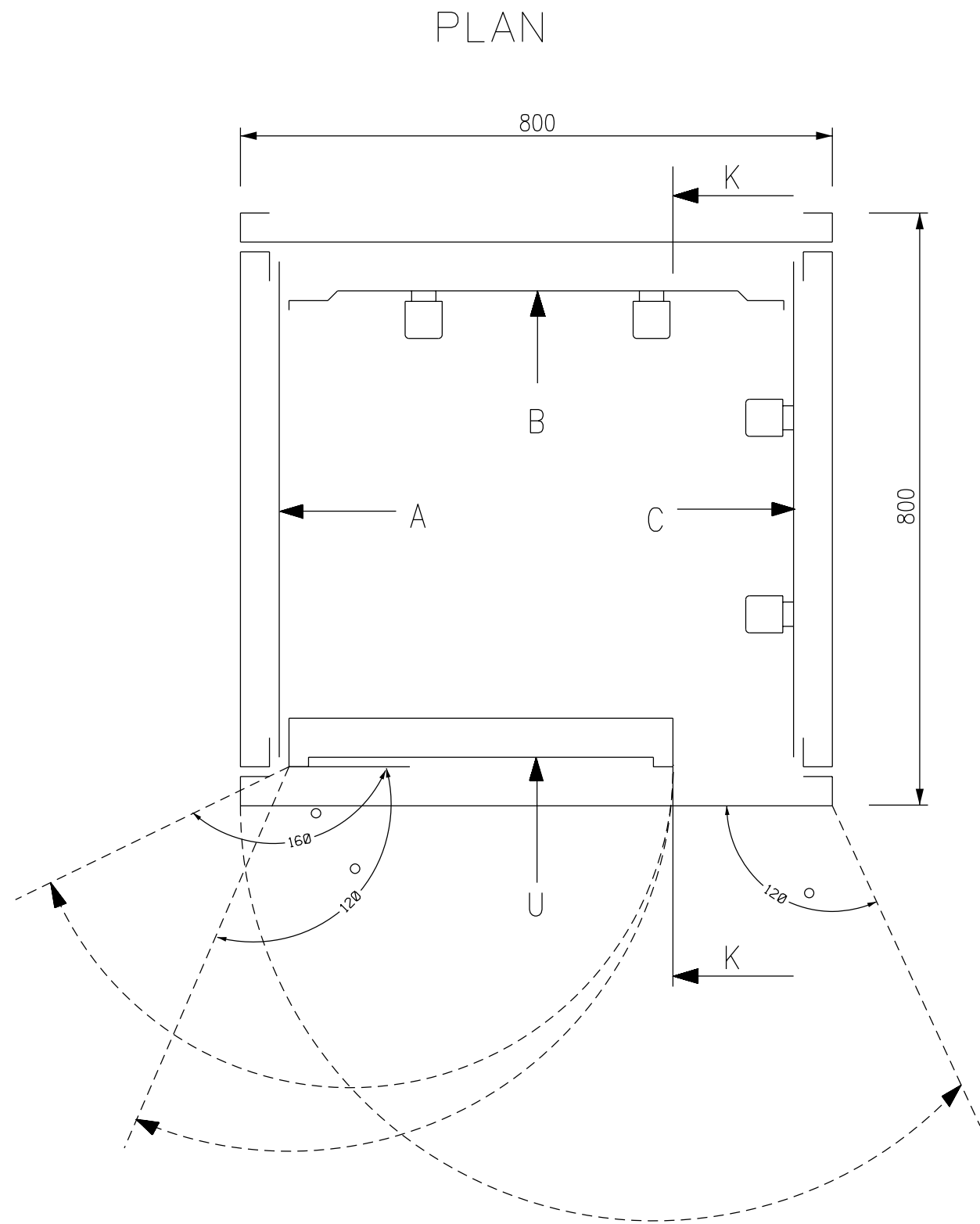
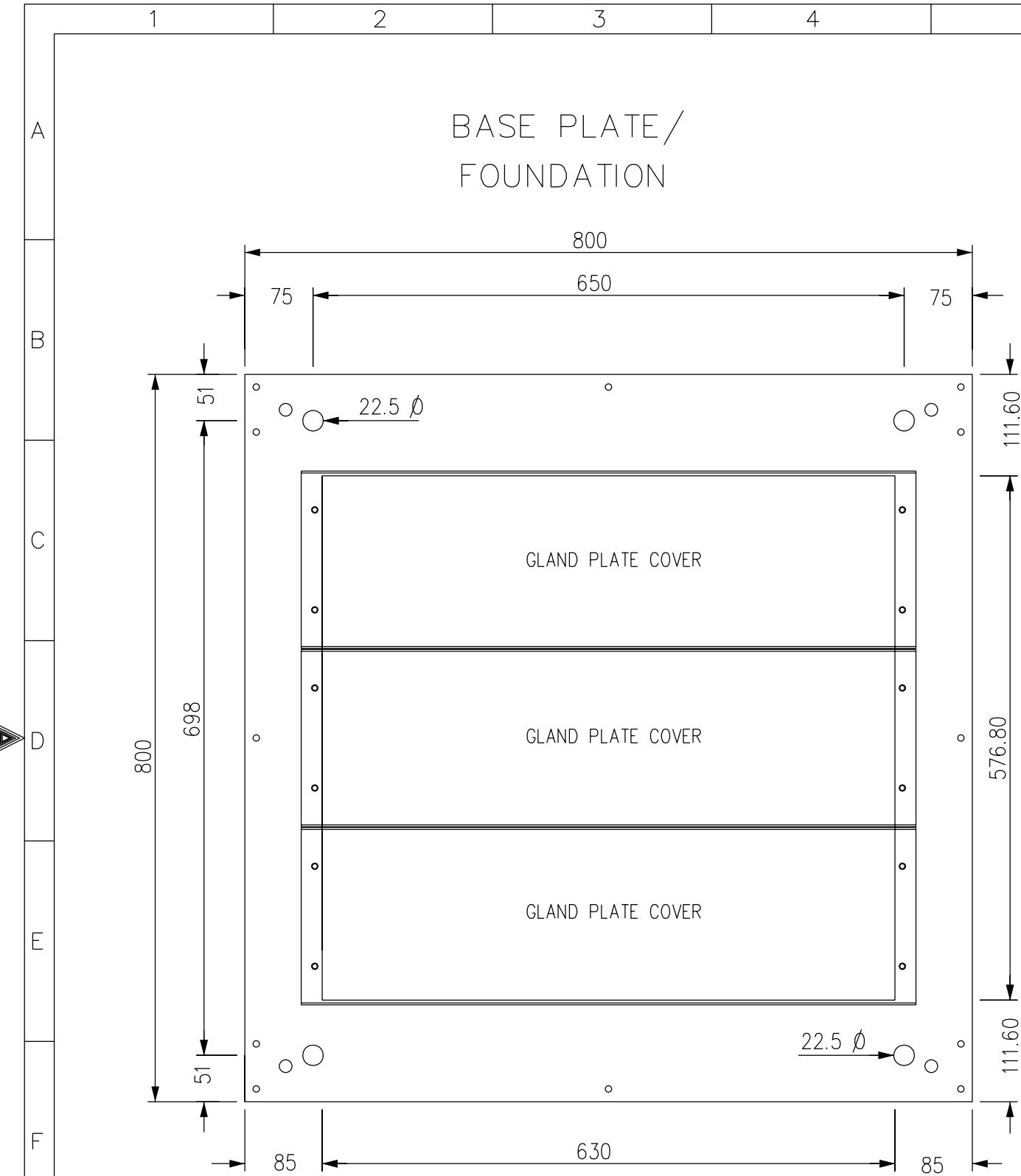
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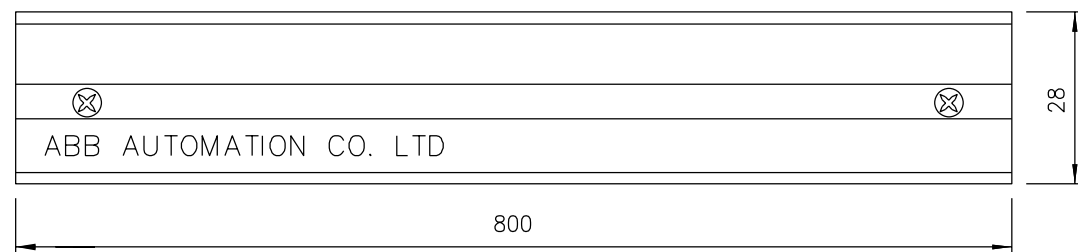
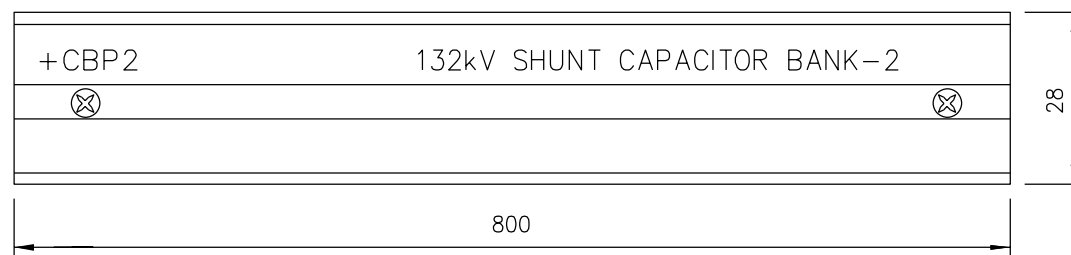
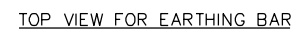
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01	14 08	FACTORY AS BUILT
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REV. NO.	DATE	DESCRIPTION

DRAWN BY	RIZ	CHECKED BY	KVR
DATE STARTED	24.01.2013	DATE COMPLETED	
OPRG. DEPT.	CTPD	ENG. DEPT.	AUT-PSAC

ASSEMBLY DRAWING	
13.8kV CAPACITOR BANK-2 PROT. PANEL	
S/S 8709-132/13.8KV IN AL-KHARJ CITY	
RIYADH SAUDI ARABIA	

الشركة الوطنية لنقل الكهرباء		نقل الكهرباء	
National Grid sa		National Grid sa	
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		01	



MANUFACTURING LABEL



PROJECT	:	National Grid SA S/S 8709
ORDER REFERENCE	:	2875 RF S13656
YEAR OF MANUFACTURE:	:	2013
PANEL NO.	:	+CBP2
DRAWING NO.	:	S13656-CD-323954

MADE IN THE KINGDOM OF SAUDI ARABIA

AS-BUILT BY _____ DATE _____	CONTRACT NO. 11131113/00	JOB ORDER NO. S-13656
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ASSEMBLY DRAWING

13.8kV CAPACITOR BANK-2 PROT. PANEL

S/S 8709-132/13.8KV IN AL-KHARJ CITY

RIYADH

SAUDI ARABIA

الشركة الوطنية لنقل الكهرباء







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NG/D2-D (2012/01)

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AS-BUILT BY _____ DATE _____

CONTRACT NO. 11131113/00

JOB ORDER NO. S-13656

01

14 08

FACTORY AS BUILT

00

13 04

FOR APPROVAL

REV. NO.

DATE

DESCRIPTION

DRAWN BY RIZ

CHECKED BY KVR

DATE STARTED 24.01.2013

DATE COMPLETED _____

OPRG. DEPT. CTPD

ENG. DEPT. AUT-PSAC


LIST OF APPARATUS

13.8kV CAPACITOR BANK-2 PROT. PANEL

S/S 8709-132/13.8KV IN AL-KHARJ CITY

RIYADH SAUDI ARABIA

الشركة الوطنية لنقل الكهرباء



National Grid sa

INDEX

PLANT NO.

DRAWING NUMBER

SHEET NO.

REV. NO.

P

C421

CD-322953

L01

L02

01

NG/D2-D (2012/01)

DMS

VECTOR

NGD200

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A																
B	SR. NO.	LOCATION REF.	SCH REF.	D E S C R I P T I O N		SHT NO.	QTY.	TYPE	MAKE	ORDERING INFORMATION						
	3	U17.5001	TS-1	TEST SWITCH FOR GROUP-1 PROTECTION		213	1	RXTP24	ABB	RK 926 315-AG						
	4	U17.5002	TS-2	TEST SWITCH FOR GROUP-2 PROTECTION		214	1	RXTP24	ABB	RK 926 315-AK						
	5	U23.5001	86C-1	GROUP-1 LOCKOUT RELAY		218	1	MVAJ105	ALSTOM	MVAJ105RA0802A						
C				AUX. VOLTAGE : 125V DC												
				CONTACTS : 8NO + 2NC												
				FLAG:STANDARD HAND RESET												
				CONTACT MECHANISM:HAND & ELECTRICAL RESET												
D	6	U23.5002	94-1	TRIP RELAY		218	1	MVAJ101	ALSTOM	MVAJ101RA0800A						
				AUX. VOLTAGE : 125V DC												
				CONTACTS : 10NO												
E	7	U23.5003	86BF	BF LOCKOUT RELAY		220	1	MVAJ105	ALSTOM	MVAJ105RA0802A						
				AUX. VOLTAGE : 125V DC/TRIPPING RELAY-HIGH BURDEN												
				CONTACTS : 8NO + 2NC												
				FLAG:STANDARD HAND RESET												
F				CONTACT MECHANISM:HAND & ELECTRICAL RESET												
	8	U23.5004	86C-2	GROUP-2 LOCKOUT RELAY		220	1	MVAJ105	ALSTOM	MVAJ105RA0802A						
				AUX. VOLTAGE : 125V DC												
				CONTACTS : 8NO + 2NC												
G				FLAG:STANDARD HAND RESET												
				CONTACT MECHANISM:HAND & ELECTRICAL RESET												
	9	U23.5005	94-2	TRIP RELAY		220	1	MVAJ101	ALSTOM	MVAJ101RA0800A						
				AUX. VOLTAGE : 125V DC												
H				CONTACTS : 10NO												
	10	U21.5001	PB11	PUSH BUTTON FOR RESETTING 86C-1 LOCKOUT RELAY		218	1	MP1-10B	ABB	1SFA 611 100 R1006						
				BUTTON COLOUR ;BLACK:CONTACT DATA:1NO+1NC				MCBH-20		1SFA 611 605 R1102						
I	11	U21.5002	PB22	PUSH BUTTON FOR RESETTING 86BF LOCKOUT RELAY		220	1	MP1-10B	ABB	1SFA 611 100 R1006						
				BUTTON COLOUR ;BLACK:CONTACT DATA:1NO+1NC				MCBH-20		1SFA 611 605 R1102						
	12	U21.5003	PB21	PUSH BUTTON FOR RESETTING 86C-2 LOCKOUT RELAY		220	1	MP1-10B	ABB	1SFA 611 100 R1006						
				BUTTON COLOUR ;BLACK:CONTACT DATA:1NO+1NC			1	MCBH-20		1SFA 611 605 R1102						
J																
	13	U27.301	74R1	DC SUPERVISION RELAY (REVERSE FLAG)		218		RXSF1	ABB	RK 271 019-AN						
			SPARE	AUX. VOLTAGE : 110-125V DC												
				CONTACTS : 1NO + 2NC PER COIL												
K				FLAG : SELF RESET												
L	AS-BUILT BY _____ DATE _____		CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		LIST OF APPARATUS		الشركة الوطنية لنقل الكهرباء National Grid sa							
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DMS

VECTOR

NGD200

NG/D2-D (2012/01)

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A		SR. NO.	LOCATION REF.	SCH. REF.	D E S C R I P T I O N		SHT NO.	QTY.	TYPE	MAKE	ORDERING INFORMATION			
		24		1X1	BOLT CONNECTING TERMINAL BLOCK DISCONNECTABLE FOR CT CIRCUIT		605	15	OTTA6T-P/P	PHOENIX	0790462			
				2X1			605	15						
		25		1X2	SPRING LOADED TERMINAL BLOCK DISCONNECTABLE FOR PT SUPPLY		605	10	D6/8.ST1.RS	ENTRELEC	1SNA 115 831 R0400			
				2X2			605	5						
B		26		X3	SPRING LOADED TERMINAL BLOCKS FOR AC SUPPLY		605	10	D6/8.ST1.RS	ENTRELEC	1SNA 115 831 R0400			
		27		1X4	SPRING LOADED TERMINAL BLOCK FOR DC CIRCUIT		605	10	D6/8.ST1.RS	ENTRELEC	1SNA 115 831 R0400			
				2X4			605	10						
		28		1X5	SPRING LOADED TERMINAL BLOCK FOR CONTROL CIRCUIT		605	25	M6/8.RS	ENTRELEC	1SNA 115 685 R1200			
				2X5			605	25						
		29		X5	SPRING LOADED TERMINAL BLOCK FOR CONTROL CIRCUIT		605	5	M6/8.RS	ENTRELEC	1SNA 115 685 R1200			
		30		X61	SRING LOADED TERMINAL BLOCK FOR STN.-COM ALARM PANEL		604	10	M6/8 SNB	ENTRELEC	1SNA 115 688 R2500			
C		31		XSH	SPRING LOADED TERMINAL BLOCK FOR SPACE HEATER		605	2	M6/8.RS	ENTRELEC	1SNA 115 688 R2500			
		32		XTJ	SPRING LOADED TERMINAL BLOCK FOR TELEPHONE JACK		605	4	M6/8.RS	ENTRELEC	ISNA 115 685 R1200			
		33		X9	SPRING LOADED TERMINAL BLOCK FOR SPARE CONTACT		605	10	M6/8.RS	ENTRELEC	ISNA 115 685 R1200			
D		34		X6	SPRING LOADED TERMINAL FOR ALARM		605	5	M6/8.RS	ENTRELEC	1SNA 115 688 R2500			
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G		AS-BUILT BY _____ DATE _____		CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		LIST OF APPARATUS		<div>الشركة الوطنية لنقل الكهرباء</div> <div>نقل الكهرباء</div> <div>National Grid sa</div>				
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D	CONTRACTOR : ABB Contracting Company																																																															
	CLIENT : National Gridsa																																																															
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LEGENDS

±R1

±R2

±R3

±IT

FL

BB RS±

BB CBF±/CBF±

R

CR

ECC

LOCAL

REMOTE

ON

OFF

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T

S

CS

CT

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LT

LC

LO

RO

DC SUPPLY – MAIN PROTECTION

DC SUPPLY – SECONDARY PROTECTION

DC SUPPLY – BACK UP PROTECTION

DC SUPPLY – INTER TRIP

DC SUPPLY – FLASHING CIRCUIT

DC SUPPLY – BUS BAR – PROTECTION RESET

DC SUPPLY – CBF PROTECTION

RESET BUS – ALARM SYSTEM

CONTROL ROOM

ENERGY CONTROL CENTRE

THE LOCATION OF CONTROLLED DEVICE

ANY OTHER LOCATION NOT LOCAL

CB NORMALLY OPEN AUXILIARY CONTACT

CB NORMALLY CLOSED AUXILIARY CONTACT

COMMON

TEST POSITION

SERVICE POSITION

CLOSE IN SERVICE POSITION

CLOSE IN TEST POSITION

LOCAL SERVICE

LOCAL TEST

LOCAL CLOSE

LOCAL OPEN

REMOTE OPEN

NOTES

LABELS

LUGS

FERULLING

WHITE LABEL WITH BLACK LETTERING WILL BE PROVIDED FOR ALL MOUNTED APPARATUS EQUIPMENT IDENTIFICATION AND FUNCTION REFERENCE LABEL WILL BE PROVIDED FOR FRONT MOUNTED EQUIPMENTS OF THE PANEL AND EQUIPMENT IDENTIFICATION LABEL WILL BE PROVIDED FOR INTERNALLY MOUNTED EQUIPMENTS

A. CT CIRCUITS– RING TYPE

B. OTHER CIRCUITS – SPADE TYPE

YELLO TUBE 3.2 mm FOR 1.5SQ mm WIRES AND 4.2 FOR 2.5 SQ mm WIRES (AS PER 31 – TMSS–1, RE.0)

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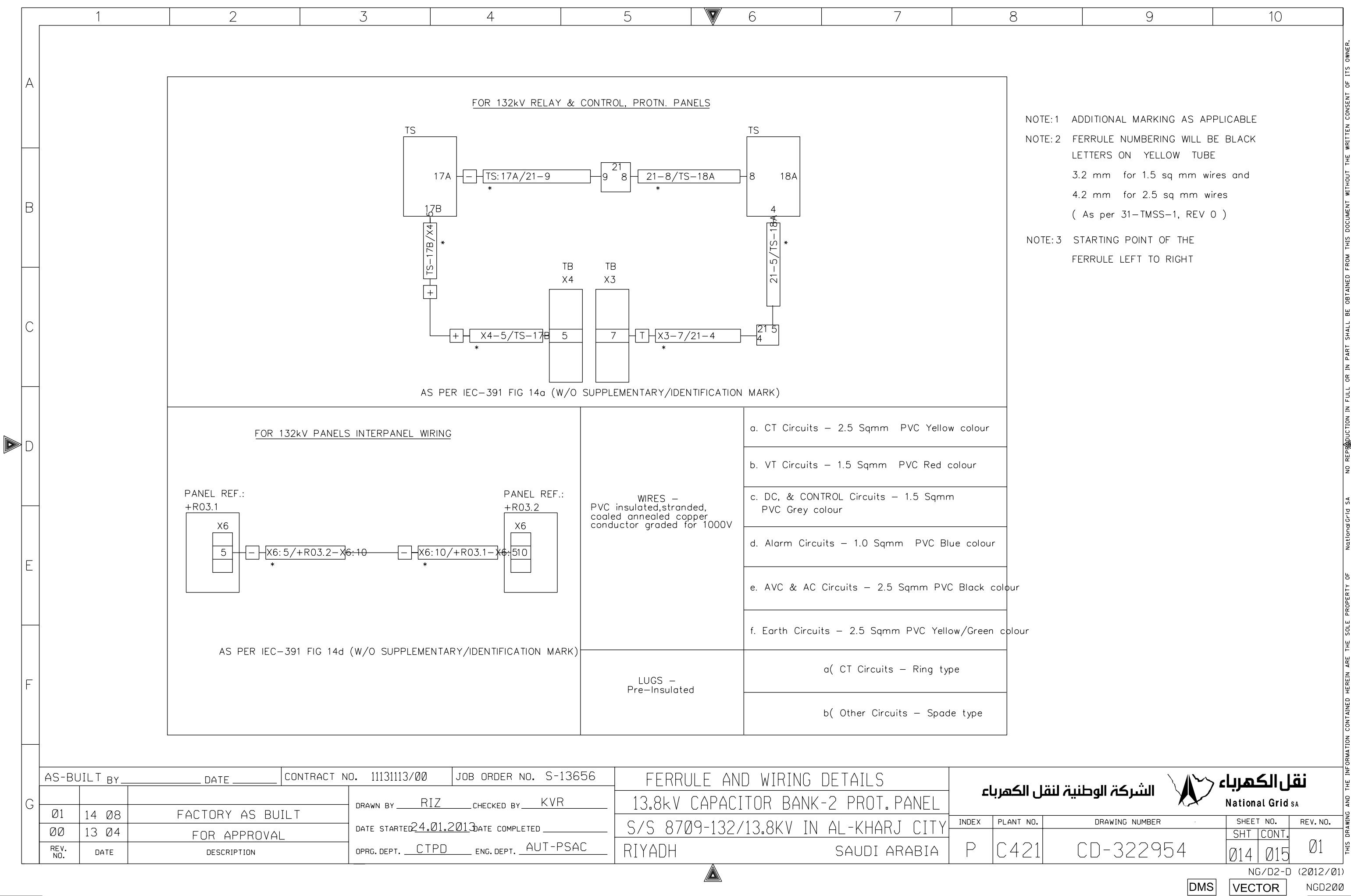
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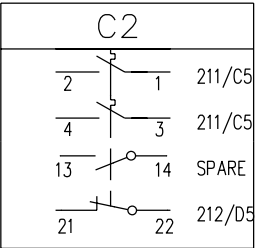
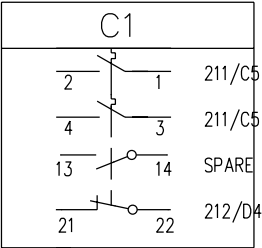
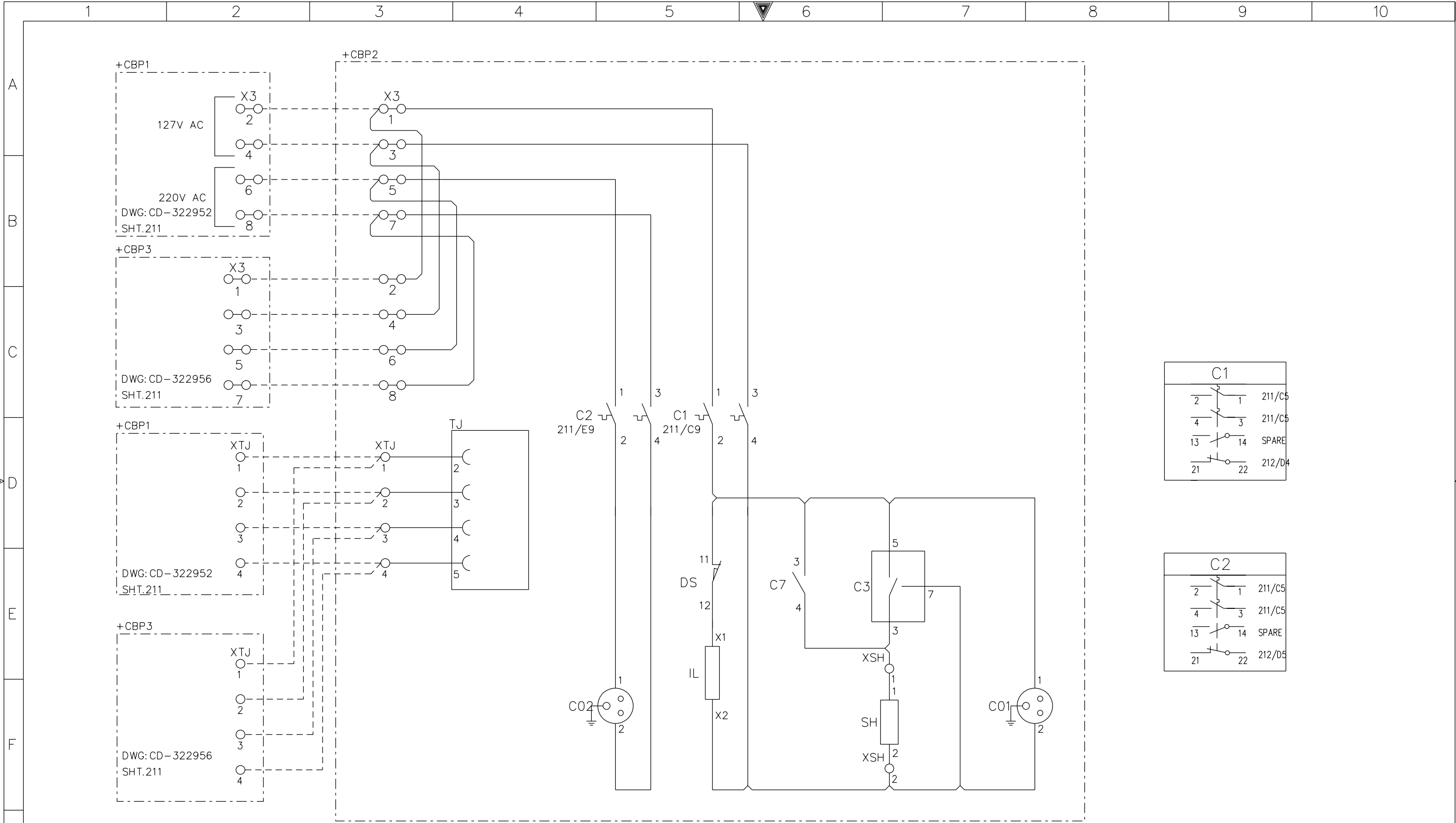
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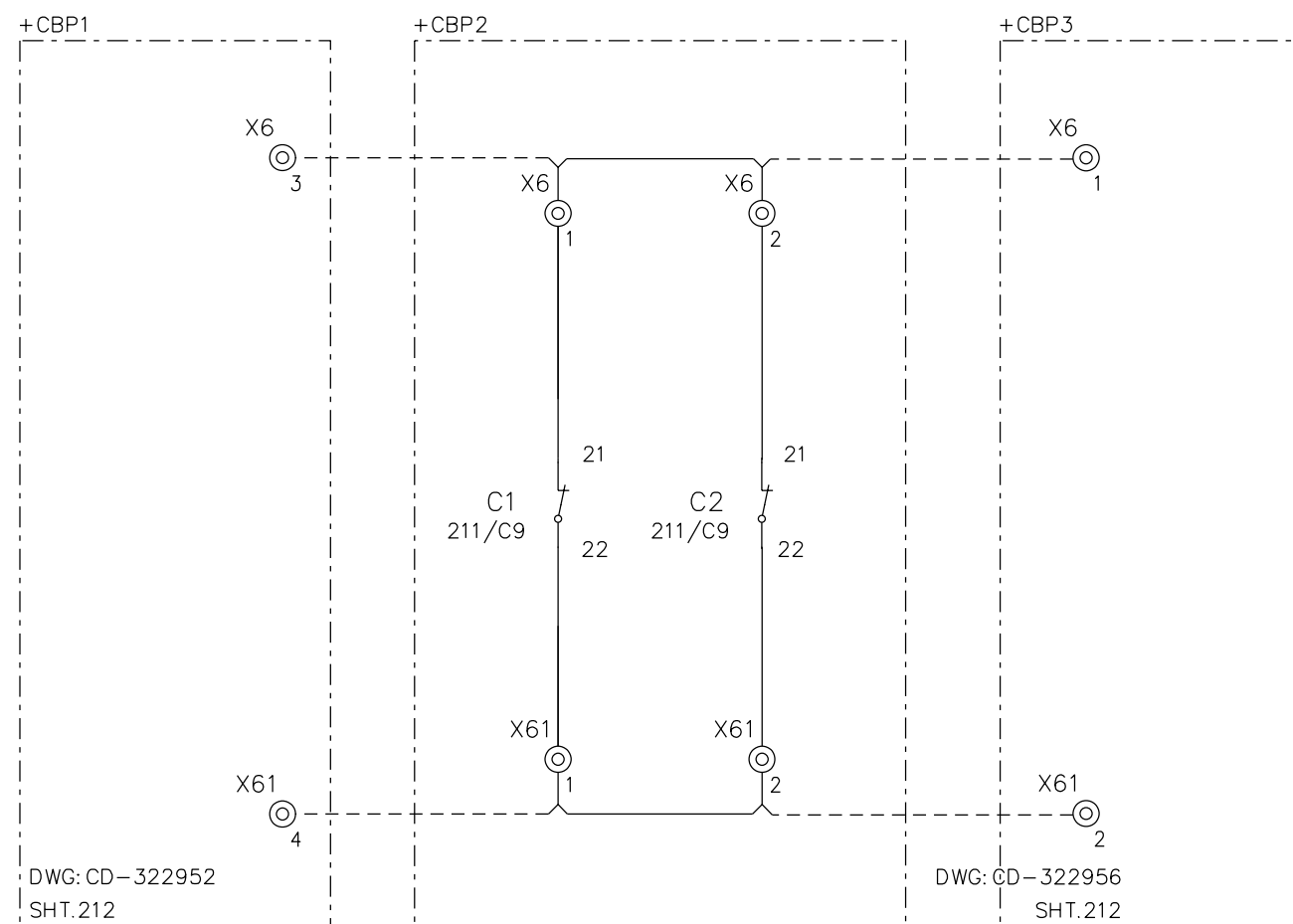


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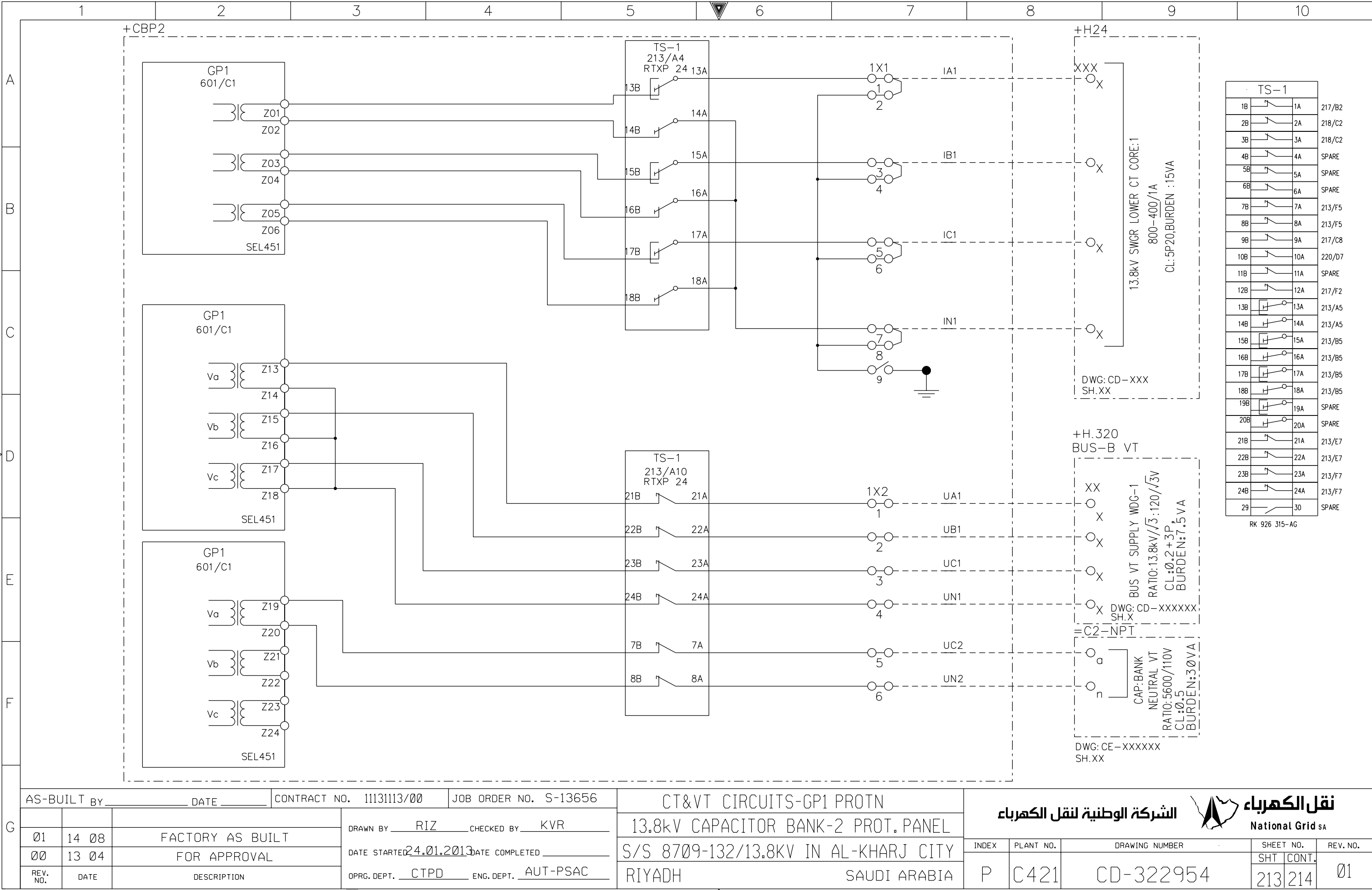
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REV. NO.	DATE	DESCRIPTION		OPRG. DEPT. <u>CTPD</u> ENG. DEPT. <u>AUT-PSAC</u>	

AC SUPPLY AUXILARY CONTACTS
13.8kV CAPACITOR BANK-2 PROT.PANEL
S/S 8709-132/13.8KV IN AL-KHARJ CITY
RIYADH SAUDI ARABIA

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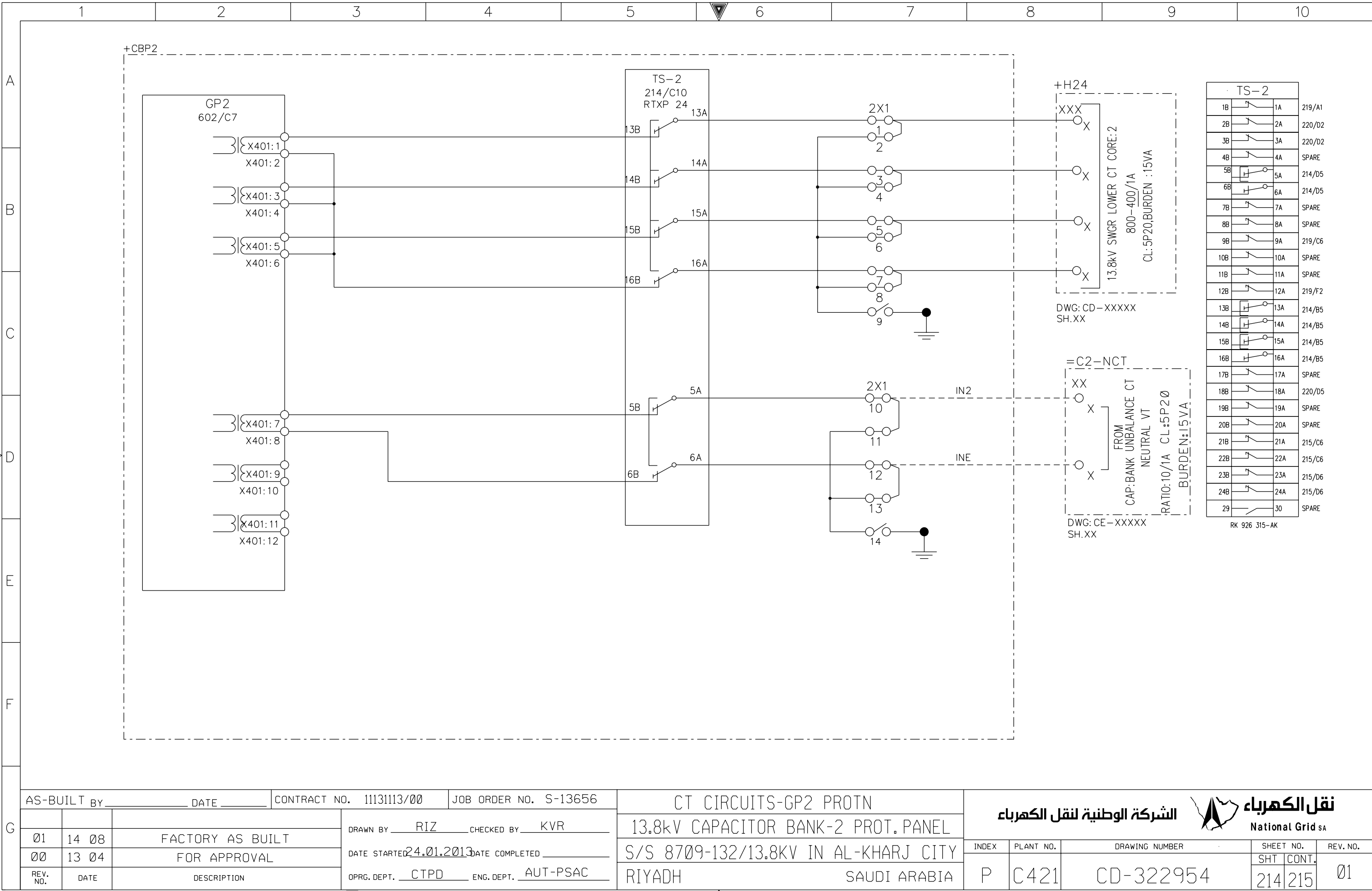


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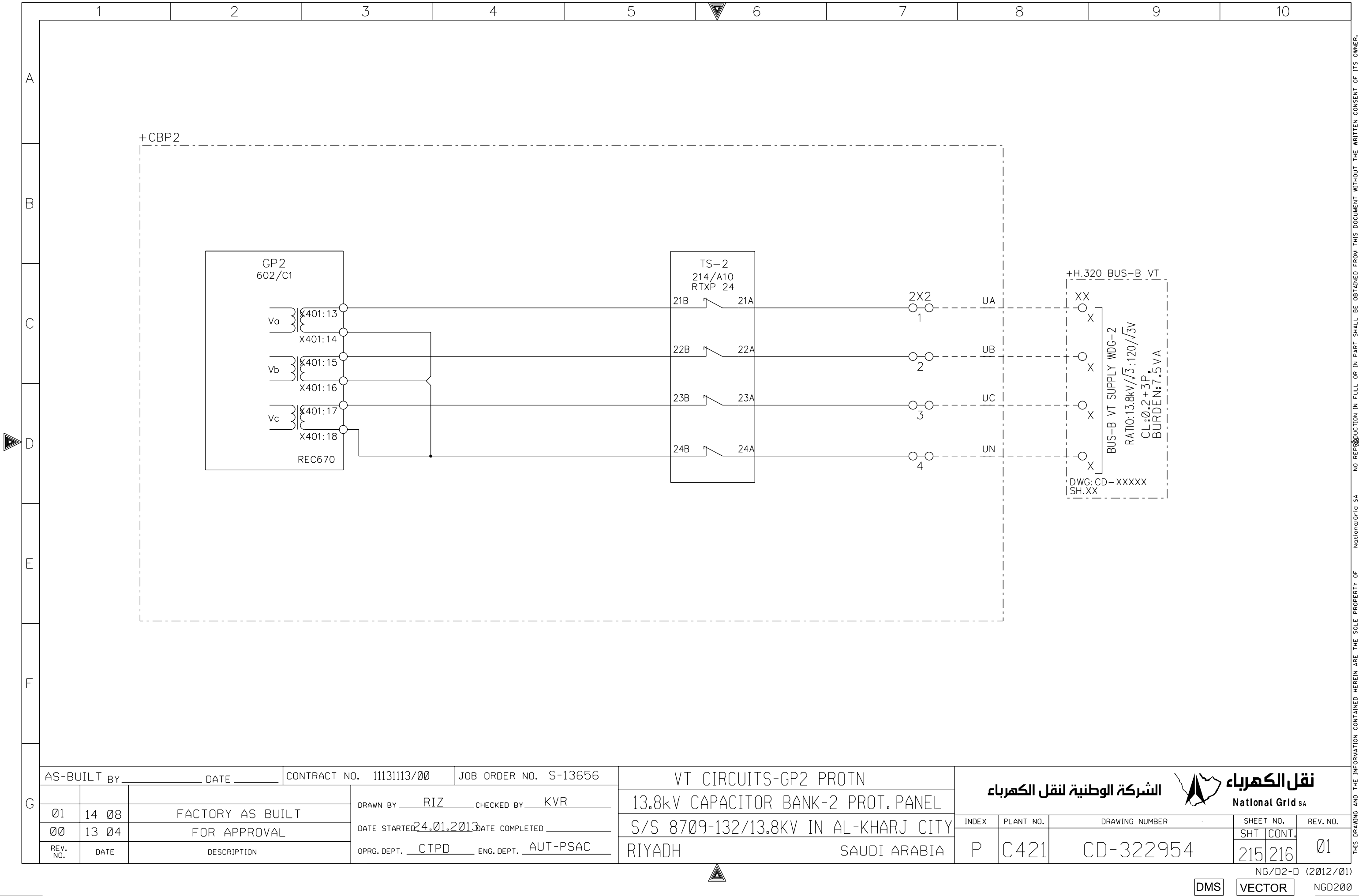
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	REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. CTPD ENG. DEPT. AUT-PSAC

CT&VT CIRCUITS-GP1 PROT N
13.8kV CAPACITOR BANK-2 PROT. PANEL
S/S 8709-132/13.8KV IN AL-KHARJ CITY
RIYADH SAUDI ARABIA

الشركة الوطنية لنقل الكهرباء National Grid sa				
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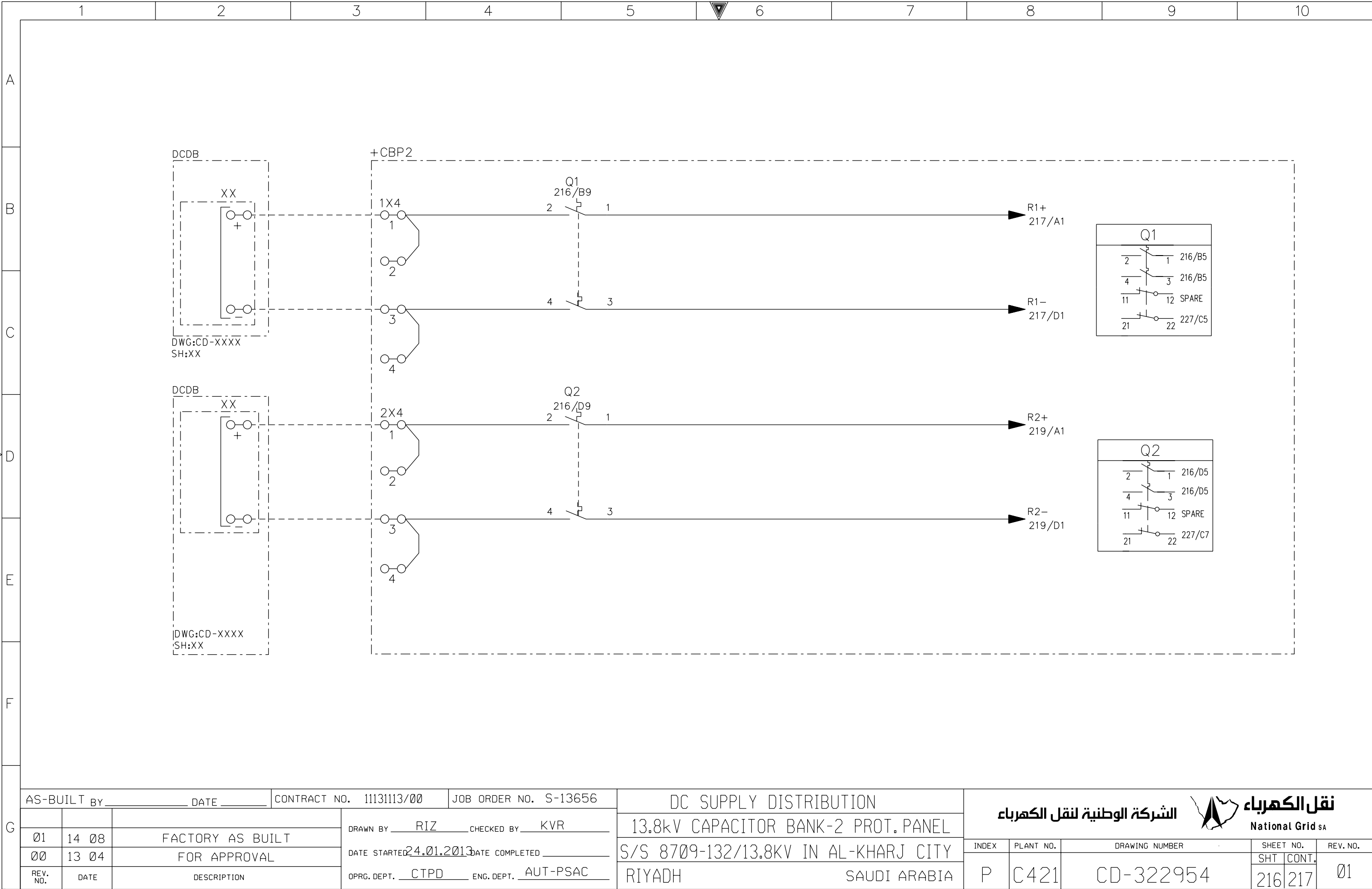


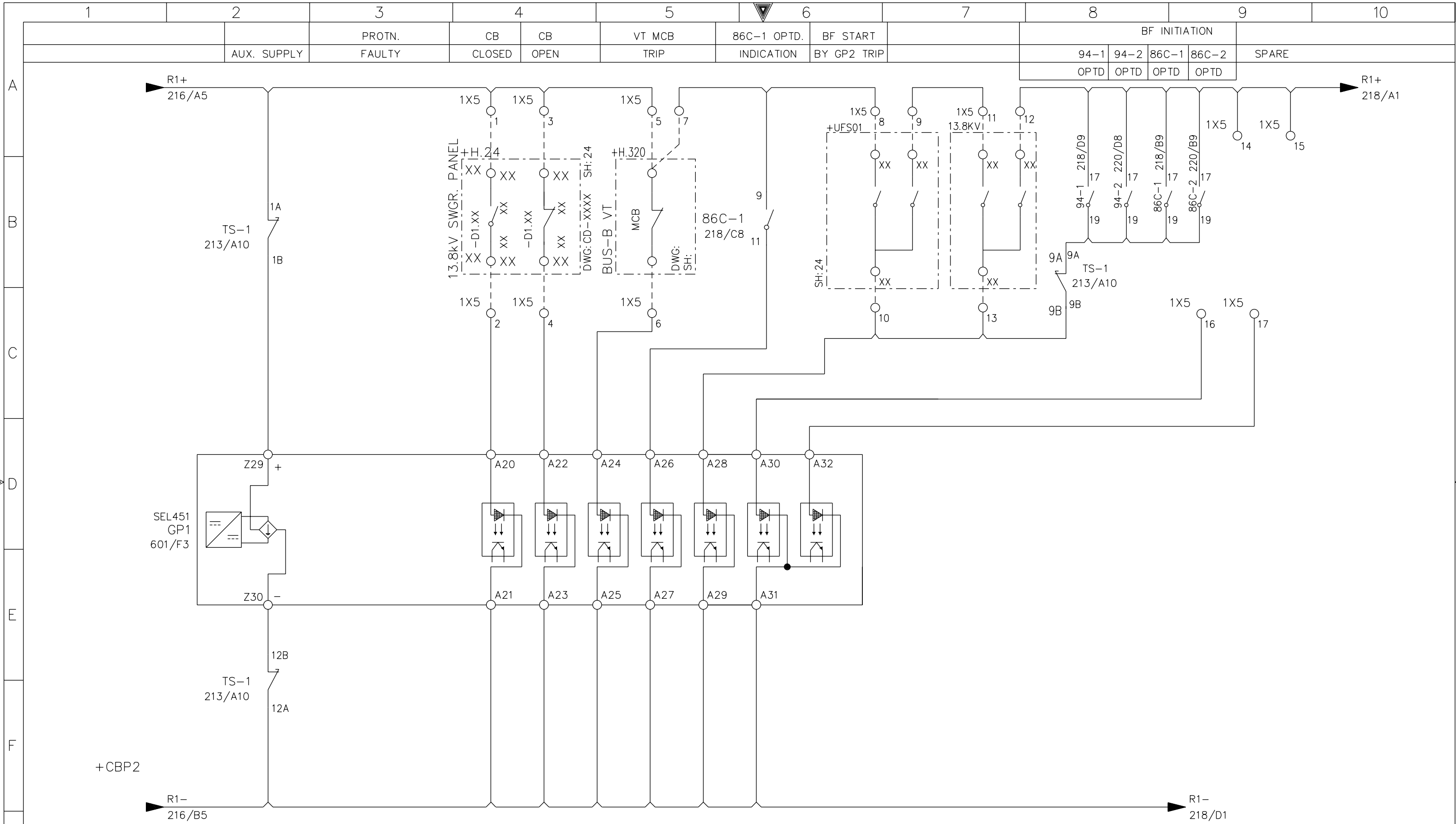
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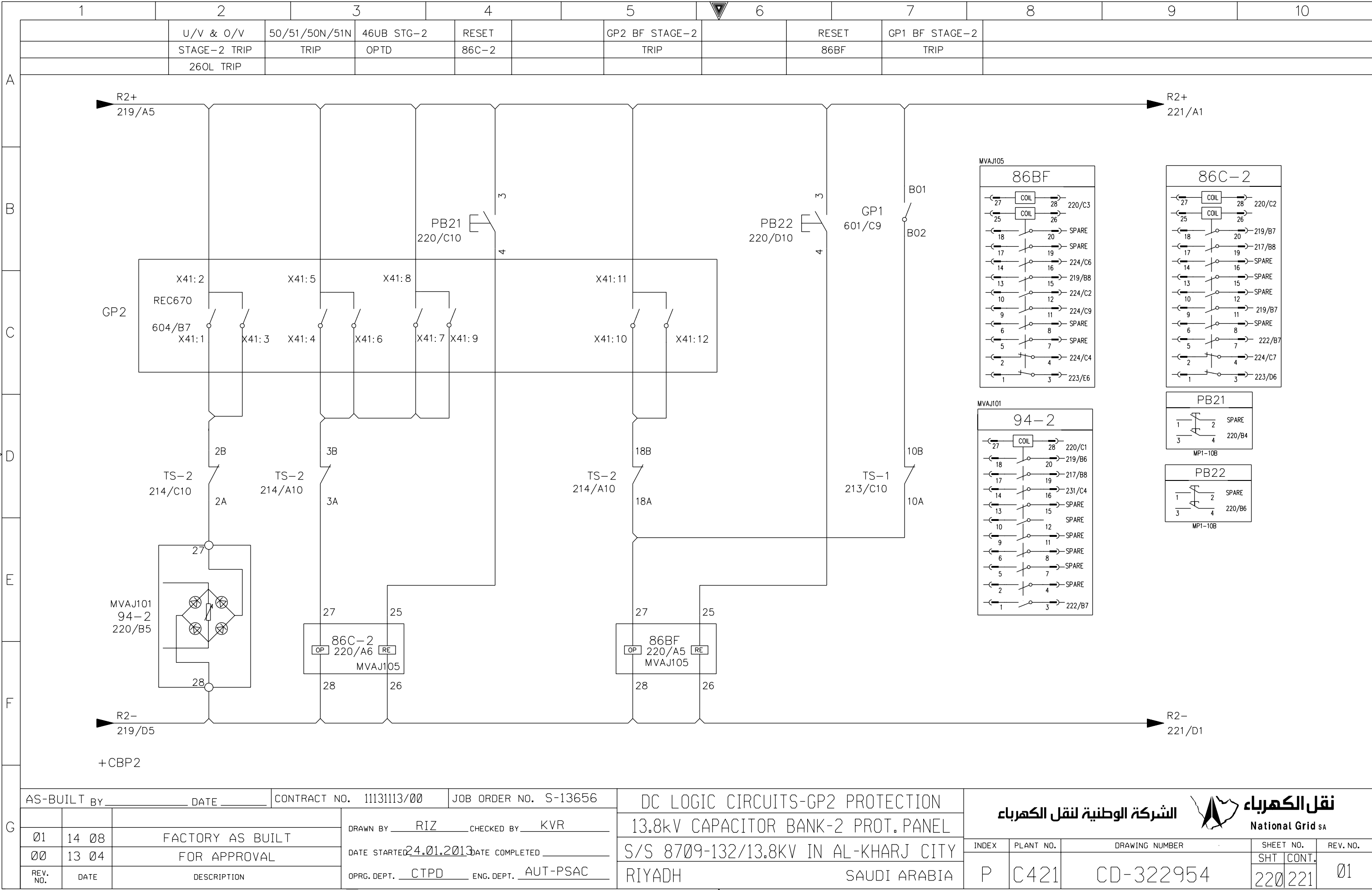
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S/S 8709-132/13.8KV IN AL-KHARJ CITY
RIYADH SAUDI ARABIA

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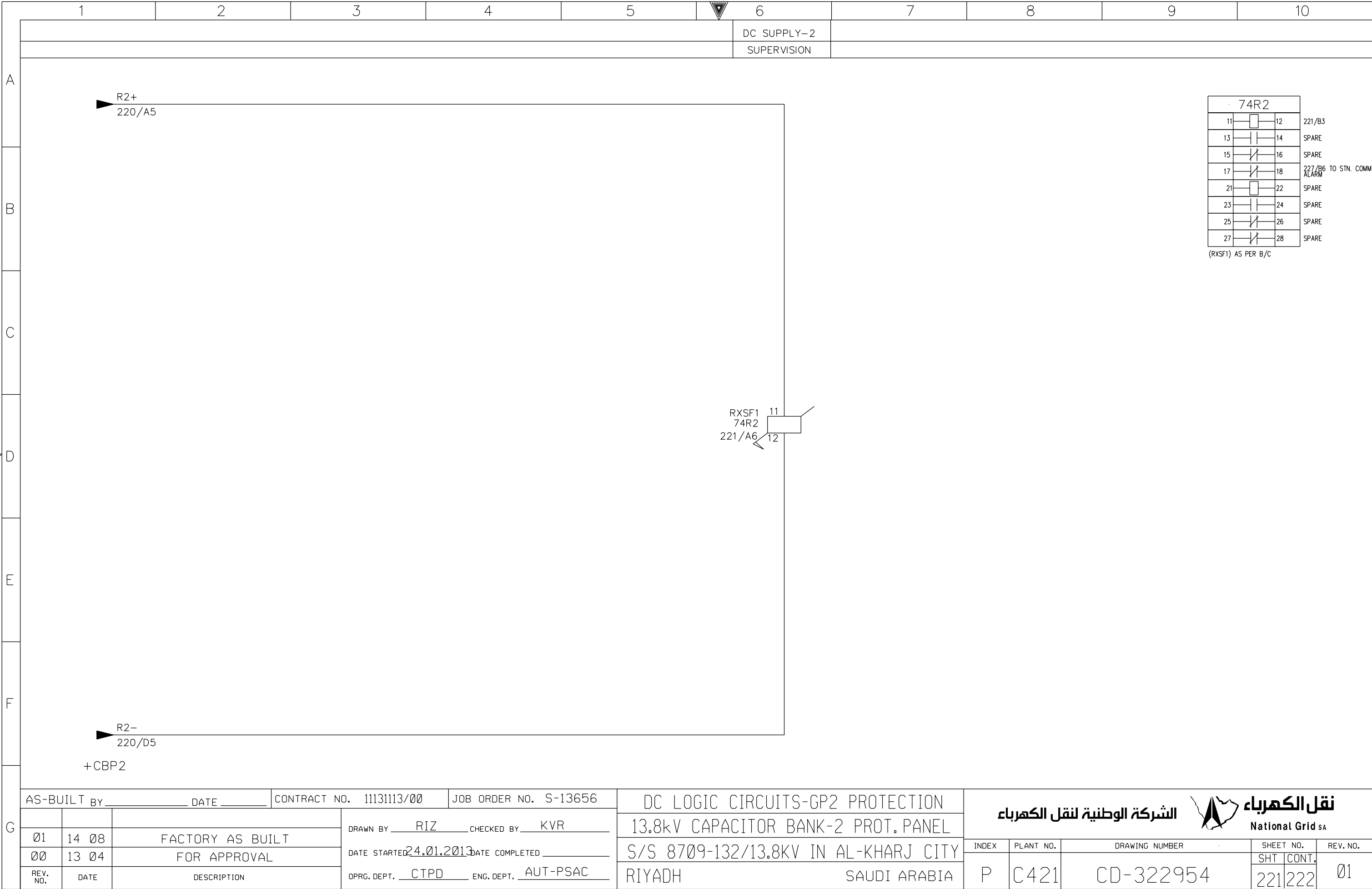




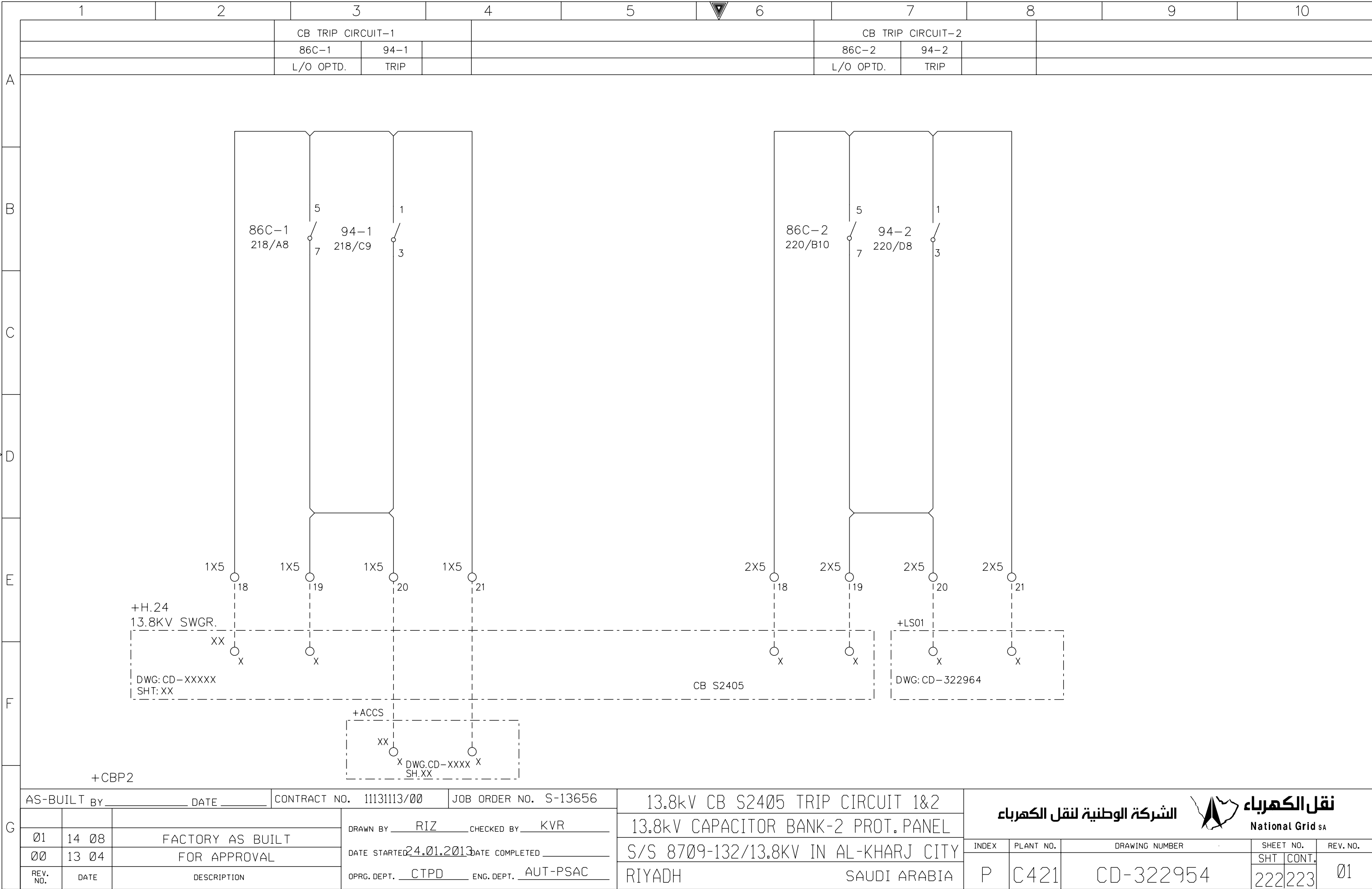
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	00	13 04	FOR APPROVAL		OPRG. DEPT. <u> CTPD </u> ENG. DEPT. <u> AUT-PSAC </u>		RIYADH SAUDI ARABIA							
	REV. NO.	DATE	DESCRIPTION						INDEX	PLANT NO.	DRAWING NUMBER		SHEET NO.	
								P	C421	CD-322954		SHT 220 CONT. 221		01



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+CBP2

AS-BUILT BY _____ DATE _____

CONTRACT NO. 11131113/00

JOB ORDER NO. S-13656

01

14 08

FACTORY AS BUILT

00

13 04

FOR APPROVAL

REV. NO.

DATE

DESCRIPTION

DRAWN BY RIZ

CHECKED BY KVR

DATE STARTED 24.01.2013

DATE COMPLETED

OPRG. DEPT. CTPD

ENG. DEPT. AUT-PSAC

13.8kv CB S2405 TRIP CIRCUIT 1&2

13.8kv CAPACITOR BANK-2 PROT. PANEL

S/S 8709-132/13.8KV IN AL-KHARJ CITY

RIYADH SAUDI ARABIA

الشركة الوطنية لنقل الكهرباء

National Grid sa

INDEX

PLANT NO.

DRAWING NUMBER

SHEET NO.

REV. NO.

P

C421

CD-322954

222

223

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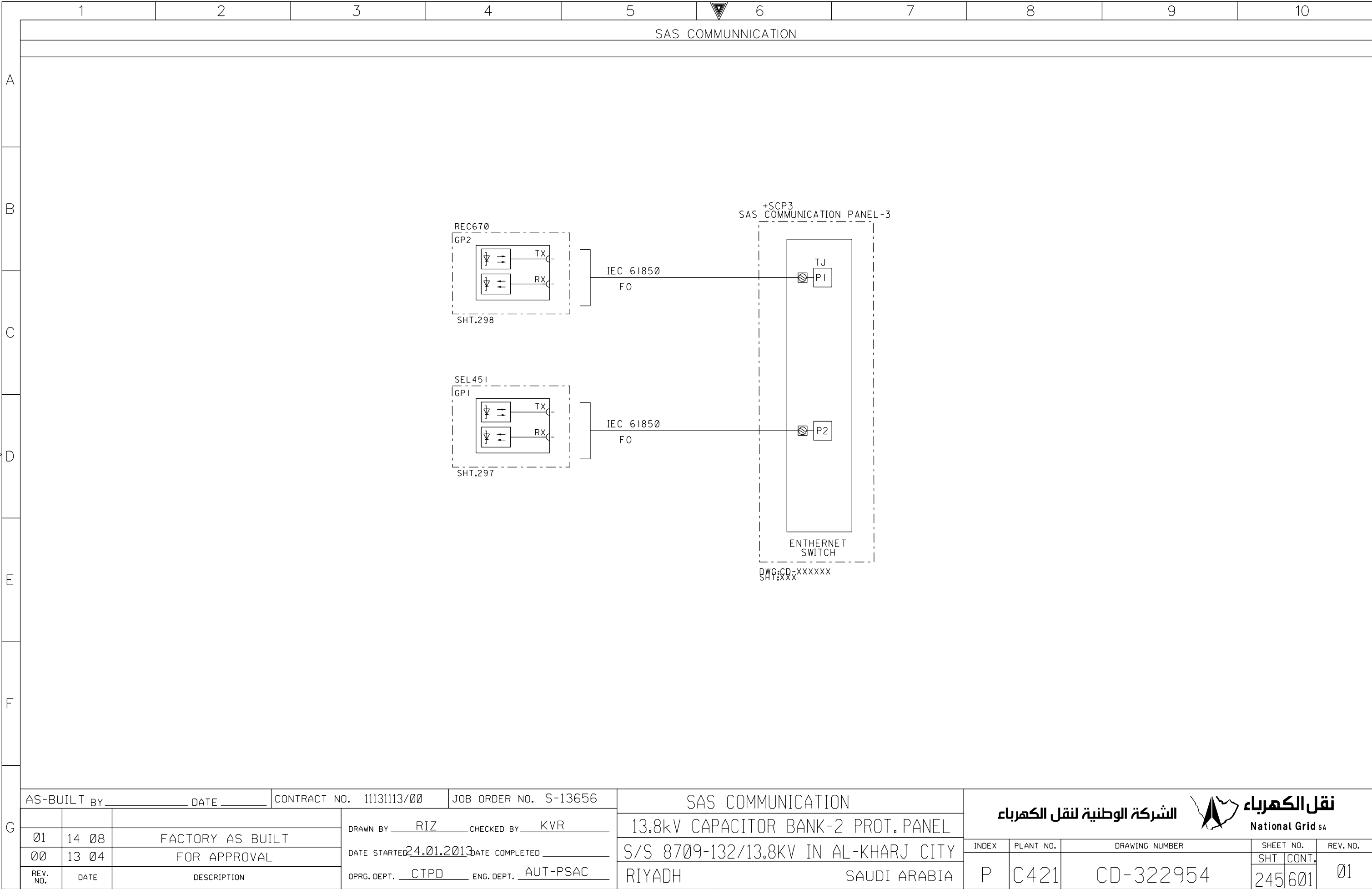
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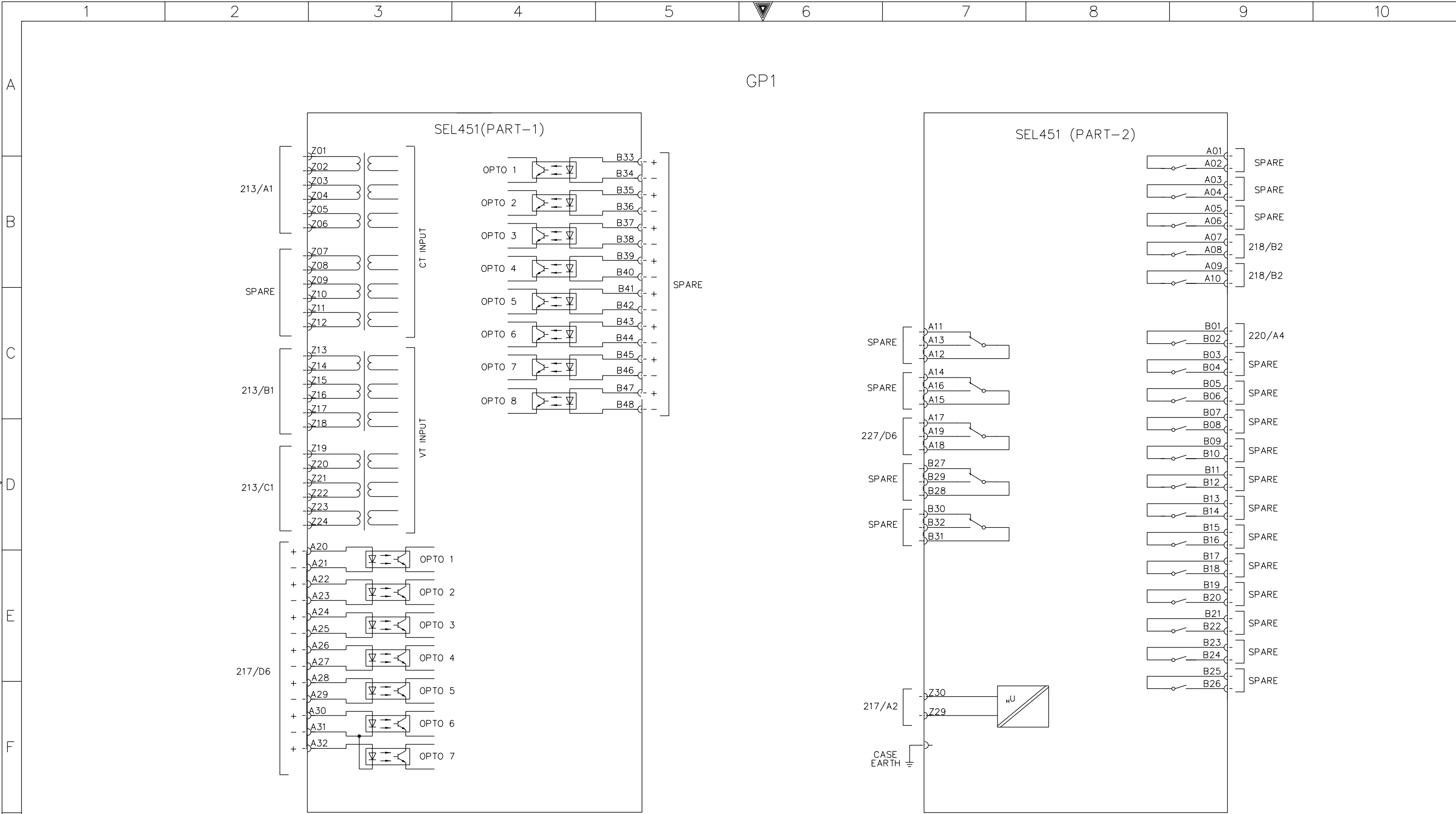
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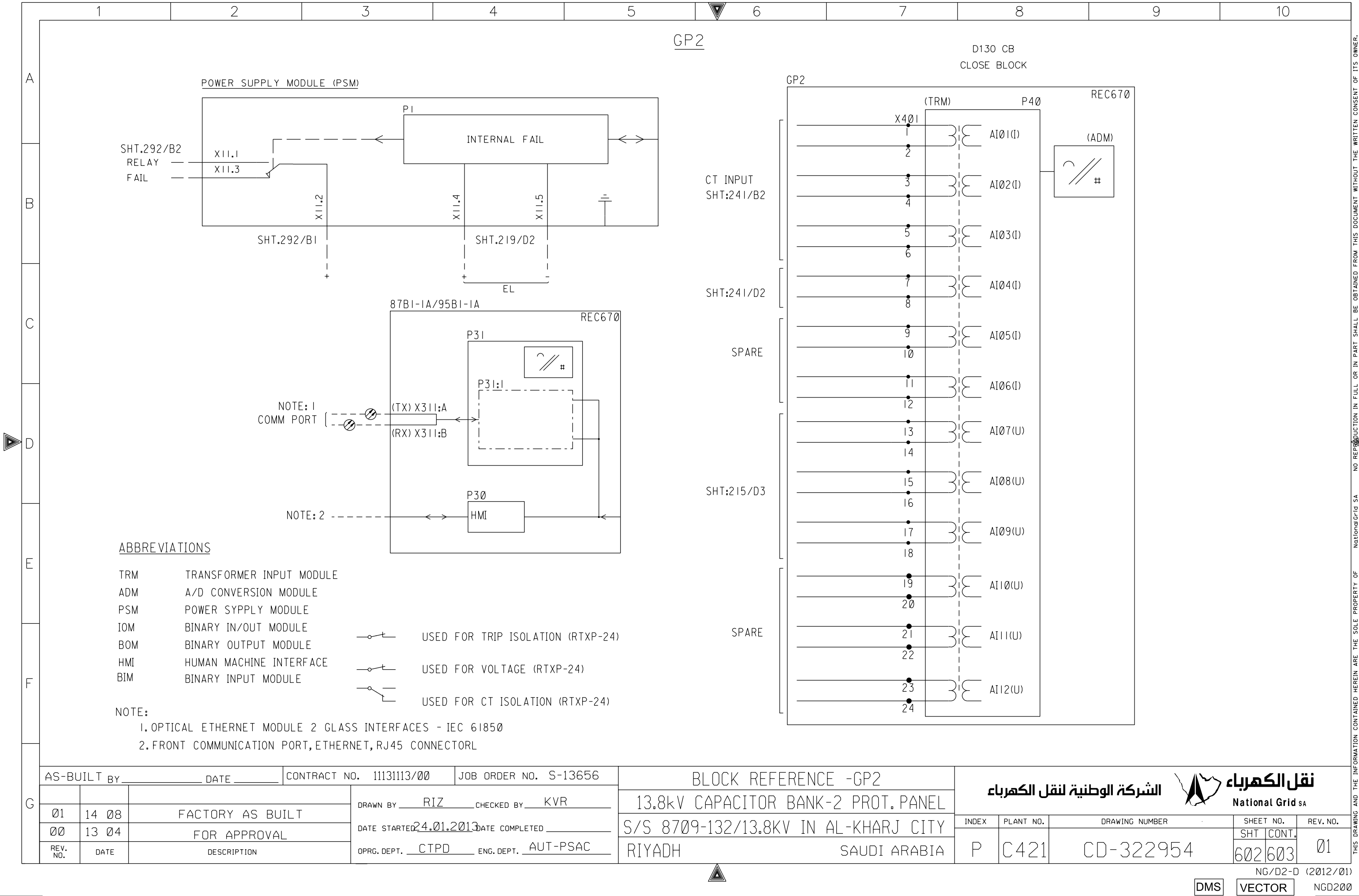
NGD200




NG/D2-D (2012/01)





G	AS-BUILT BY _____ DATE _____		CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		BLOCK REFERENCE-GP1		<div>نقل الكهرباء</div> <div>الشركة الوطنية لنقل الكهرباء</div> <div>National Grid sa</div>						
					DRAWN BY <u> RIZ </u> CHECKED BY <u> KVR </u>		13.8kV CAPACITOR BANK-2 PROT. PANEL								
	01	14 08	FACTORY AS BUILT		DATE STARTED <u>24.01.2013</u> DATE COMPLETED _____		S/S 8709-132/13.8KV IN AL-KHARJ CITY								
	00	13 04	FOR APPROVAL		OPRG. DEPT. <u> CTPD </u> ENG. DEPT. <u> AUT-PSAC </u>		RIYADH SAUDI ARABIA		INDEX	PLANT NO.	DRAWING NUMBER		SHEET NO.		REV. NO.
	REV. NO.	DATE	DESCRIPTION						P	C421	CD-322954		SHT	CONT.	01



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A	INTERNAL REFERENCE		X3 AC CKT.		INTERNAL REFERENCE		1X1 CT CKTS.		INTERNAL REFERENCE		1X2 CT CKTS.		INTERNAL REFERENCE		1X4 DC CKTS.		INTERNAL REFERENCE		1X5 CONTROL & PROTN.		INTERNAL REFERENCE		2X5 CONTROL & PROTN.	
	211/A2		1		213/A7		1		213/D7		1		216/B3		1		217/A4		1		219/A4		1	
	211/A5		2		213/A7		2		213/E7		2		216/B3		2		217/C4		2		219/C4		2	
	211/A2		3		213/B7		3		213/E7		3		216/C3		3		217/C4		3		219/C4		3	
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	211/A2		5		213/B7		5		213/F7		5		SPARE		5		217/C5		5		219/C5		5	
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	211/A2		7		213/C7		7		SPARE		7		SPARE		7		217/A6		7		219/A6		7	
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SPARE		10		SPARE		10		SPARE		10		SPARE		10		217/A7		10		219/A7		10		
B	INTERNAL REFERENCE		XSH SPACE HEATER		INTERNAL REFERENCE		2X1 CT CKTS.		INTERNAL REFERENCE		1X2 CT CKTS.		INTERNAL REFERENCE		2X4 DC CKTS.		INTERNAL REFERENCE		1X5 CONTROL & PROTN.		INTERNAL REFERENCE		2X5 CONTROL & PROTN.	
	211/C4		1		214/A7		1		215/C7		1		216/D3		1		222/E2		1		222/E6		1	
	211/D4		2		214/A7		2		215/C7		2		216/D3		2		222/E3		2		222/E7		2	
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	INTERNAL REFERENCE		XTJ T.JACK		214/B7		4		215/D7		4		SPARE		4		222/E5		4		SPARE		4	
	211/B2		1		214/B7		5		SPARE		5		SPARE		5		223/E5		5		SPARE		5	
	211/B2		2		214/C7		6		SPARE		6		SPARE		6		223/E6		6		SPARE		6	
	211/B2		3		214/C7		7		SPARE		7		SPARE		7		SPARE		7		SPARE		7	
	211/B2		4		214/C7		8		SPARE		8		SPARE		8		SPARE		8		SPARE		8	
	SPARE		5		214/D7		9		SPARE		9		SPARE		9		SPARE		9		SPARE		9	
C	INTERNAL REFERENCE		X61 ALARM CKT		214/D7		10		INTERNAL REFERENCE		X5 CONTROL & PROTN.		INTERNAL REFERENCE		X9 SPARE CKT		INTERNAL REFERENCE		1X5 CONTROL & PROTN.		INTERNAL REFERENCE		2X5 CONTROL & PROTN.	
	216/B3		1		214/E7		11		224/D5		1		231/E3		1		217/A9		1		219/A9		1	
	216/B3		2		214/E7		12		224/D5		2		231/E3		2		222/E6		2		219/C9		2	
	227/E3		3		SPARE		13		SPARE		3		231/E4		3		222/E7		3		219/A9		3	
	227/E4		4		SPARE		14		SPARE		4		231/E4		4		222/E8		4		219/C9		4	
	227/E6		5		SPARE		15		SPARE		5		231/E5		5		SPARE		5		219/A9		5	
	227/E7		6		SPARE		16		SPARE		6		231/E5		6		SPARE		6		219/C9		6	
	SPARE		7		SPARE		17		SPARE		7		231/E6		7		SPARE		7		219/A9		7	
	SPARE		8		INTERNAL REFERENCE		X5 CONTROL & PROTN.		INTERNAL REFERENCE		X4 DC CKTS.		INTERNAL REFERENCE		X9 SPARE CKT		INTERNAL REFERENCE		1X5 CONTROL & PROTN.		INTERNAL REFERENCE		2X5 CONTROL & PROTN.	
	SPARE		9		224/D5		1		216/D3		1		217/A9		1		222/E2		1		219/A9		1	
D	SPARE		10		224/D5		2		216/D3		2		217/A9		2		222/E3		2		219/A9		2	
	SPARE		11		SPARE		3		216/E3		3		217/A9		3		222/E4		3		219/A9		3	
	SPARE		12		SPARE		4		SPARE		4		217/A9		4		222/E5		4		219/A9		4	
	SPARE		13		SPARE		5		SPARE		5		217/A9		5		222/E6		5		219/A9		5	
	SPARE		14		SPARE		6		SPARE		6		217/A9		6		222/E7		6		219/A9		6	
	SPARE		15		SPARE		7		SPARE		7		217/A9		7		222/E8		7		219/A9		7	
	SPARE		16		SPARE		8		SPARE		8		217/A9		8		SPARE		8		219/A9		8	
	SPARE		17		SPARE		9		SPARE		9		217/A9		9		SPARE		9		219/A9		9	
	SPARE		18		SPARE		10		SPARE		10		217/A9		10		SPARE		10		219/A9		10	
	SPARE		19		SPARE		11		SPARE		11		217/A9		11		SPARE		11		219/A9		11	
E	INTERNAL REFERENCE		X61 ALARM CKT		214/D7		10		INTERNAL REFERENCE		X5 CONTROL & PROTN.		INTERNAL REFERENCE		X9 SPARE CKT		INTERNAL REFERENCE		1X5 CONTROL & PROTN.		INTERNAL REFERENCE		2X5 CONTROL & PROTN.	
	216/B3		1		214/E7		11		224/D5		1		231/E3		1		217/A9		1		219/A9		1	
	216/B3		2		214/E7		12		224/D5		2		231/E3		2		222/E6		2		219/A9		2	
	227/E3		3		SPARE		13		SPARE		3		231/E4		3		222/E7		3		219/A9		3	
	227/E4		4		SPARE		14		SPARE		4		231/E4		4		222/E8		4		219/A9		4	
	227/E6		5		SPARE		15		SPARE		5		231/E5		5		SPARE		5		219/A9		5	
	227/E7		6		SPARE		16		SPARE		6		231/E5		6		SPARE		6		219/A9		6	
	SPARE		7		SPARE		17		SPARE		7		231/E6		7		SPARE		7		219/A9		7	
	SPARE		8		INTERNAL REFERENCE		X5 CONTROL & PROTN.		INTERNAL REFERENCE		X4 DC CKTS.		INTERNAL REFERENCE		X9 SPARE CKT		INTERNAL REFERENCE		1X5 CONTROL & PROTN.		INTERNAL REFERENCE		2X5 CONTROL & PROTN.	
	SPARE		9		224/D5		1		216/D3		1		217/A9		1		222/E2		1		219/A9		1	
F	SPARE		10		224/D5		2		216/D3		2		217/A9		2		222/E3		2		219/A9		2	
	SPARE		11		SPARE		3		216/E3		3		217/A9		3		222/E4		3		219/A9		3	
	SPARE		12		SPARE		4		SPARE		4		217/A9		4		222/E5		4		219/A9		4	
	SPARE		13		SPARE		5		SPARE		5		217/A9		5		222/E6		5		219/A9		5	
	SPARE		14		SPARE		6		SPARE		6		217/A9		6		222/E7		6		219/A9		6	
	SPARE		15		SPARE		7		SPARE		7		217/A9		7		222/E8		7		219/A9		7	
	SPARE		16		SPARE		8		SPARE		8		217/A9		8		SPARE		8		219/A9		8	
	SPARE		17		SPARE		9		SPARE		9		217/A9		9		SPARE		9		219/A9		9	
	SPARE		18		SPARE		10		SPARE		10		217/A9		10		SPARE		10		219/A9		10	
	SPARE		19		SPARE		11		SPARE		11		217/A9		11		SPARE		11		219/A9		11	
G	INTERNAL REFERENCE		X61 ALARM CKT		214/D7		10		INTERNAL REFERENCE		X5 CONTROL & PROTN.		INTERNAL REFERENCE		X9 SPARE CKT		INTERNAL REFERENCE		1X5 CONTROL & PROTN.		INTERNAL REFERENCE		2X5 CONTROL & PROTN.	
	216/B3		1		214/E7		11		224/D5		1		231/E3		1		217/A9		1		219/A9		1	
	216/B3		2		214/E7		12		224/D5		2		231/E3		2		222/E6		2		219/A9		2	
	227/E3		3		SPARE		13		SPARE		3		231/E4		3		222/E7		3		219/A9		3	
	227/E4		4		SPARE		14		SPARE		4		231/E4		4		222/E8		4		219/A9		4	
	227/E6		5		SPARE		15		SPARE		5		231/E5		5		SPARE		5		219/A9		5	
	227/E7		6		SPARE		16		SPARE		6		231/E5		6		SPARE		6		219/A9		6	
	SPARE		7		SPARE		17		SPARE		7		231/E6		7		SPARE		7		219/A9		7	
	SPARE		8		INTERNAL REFERENCE		X5 CONTROL & PROTN.		INTERNAL REFERENCE		X4 DC CKTS.		INTERNAL REFERENCE		X9 SPARE CKT		INTERNAL REFERENCE		1X5 CONTROL & PROTN.		INTERNAL REFERENCE		2X5 CONTROL & PROTN.	
	SPARE		9		224/D5		1		216/D3		1		217/A9		1		222/E2		1		219/A9		1	
SPARE		10		224/D5		2		216/D3		2		217/A9		2		222/E3		2		219/A9		2		
AS-BUILT BY _____ DATE _____		CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		TERMINAL BLOCK ALLOCATION		13.8kV CAPACITOR BANK-2 PROT. PANEL		الشركة الوطنية لنقل الكهرباء		National Grid sa		INDEX		PLANT NO.		DRAWING NUMBER		SHEET NO.		REV. NO.		
01 14 08		FACTORY AS BUILT		DRAWN BY RIZ CHECKED BY KVR		13.8kV CAPACITOR BANK-2 PROT. PANEL		S/S 8709-132/13.8KV IN AL-KHARJ CITY		P		C421		CD-322954		605		NIL		01				
00 13 04		FOR APPROVAL		DATE STARTED 24.01.2013 DATE COMPLETED _____		S/S 8709-132/13.8KV IN AL-KHARJ CITY		SAUDI ARABIA		P		C421		CD-322954		605		NIL		01				
REV. NO. DATE DESCRIPTION		OPRG. DEPT. CTPD ENG. DEPT. AUT-PSAC		RIYADH		SAUDI ARABIA		SAUDI ARABIA		P		C421		CD-322954		605		NIL		01				

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NG/D2-D (2012/01)

DMS

VECTOR

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